## What is claimed is:

1. A system for improving predictive failure attributes of distributed devices, comprising:

a plurality of devices, each of said plurality of devices including failure sensing means arranged for collecting failure analysis data of said device and communication means coupled to said failure sensing means and arranged for transmitting said failure analysis data;

a network coupled to said communication means of each of said plurality of devices; and,

a server coupled to receive said failure analysis data of each of said plurality of devices via said network;

wherein said server is arranged for analysing said failure analysis data received from each of said plurality of devices and for providing failure information.

- 2. The system of claim 1 wherein said device includes an algorithm for managing the operation of the failure tolerant component and wherein said failure information includes an updated algorithm for providing improved operation of said failure tolerant component.
- 3. The system of claim 2 wherein said updated algorithm is transmitted to said device via said network.
- 4. The system of claim 1 wherein said failure information is used to improve design and manufacturing steps for future devices.
- 5. The system of claim 1 wherein said failure information provides an indication of operating lifespan of said devices.

- 6. The system of claim 3 wherein said device is coupled to said network via an intermediary software agent.
- 7. The system of claim 6 wherein said intermediary software agent is installed on a local server.
- 8. The system of claim 7 wherein said local server includes a database arranged for storing said failure analysis data from said device, said local server being arranged for periodically uploading said failure analysis data to said manufacturer's server.

## 9. A device comprising:

failure sensing means arranged for collecting failure analysis data of said device; and,

communication means coupled to said failure sensing means and arranged for transmitting said failure analysis data to a remote server via a network,

wherein said server is arranged for analysing said failure analysis data received from said device and from other devices and for providing failure information.

- 10. The device of claim 9 wherein said device includes an algorithm for managing the operation of the failure tolerant component and wherein said failure information includes an updated algorithm for providing improved operation of said failure tolerant component.
- 11. The device of claim 10 wherein said updated algorithm is transmitted to said device via said network.

- 12. The device of claim 9 wherein said failure information is used to improve design and manufacturing steps for future devices.
- 13. The device of claim 9 wherein said failure information provides an indication of operating lifespan of said devices.
- 14. The device of claim 11 wherein said device is coupled to said network via an intermediary software agent.
- 15. The device of claim 14 wherein said intermediary software agent is installed on a local server.
- 16. The device of claim 15 wherein said local server includes a database arranged for storing said failure analysis data from said device, said local server being arranged for periodically uploading said failure analysis data to said manufacturer's server.
- 17. A method for performing predictive data analysis of a number of distributed devices, said method comprising the steps of:

collecting failure analysis data from a number of failure tolerant components of said number of distributed devices;

transmitting said failure analysis data to a central server via a network coupled to each of said devices;

processing said failure analysis data;

analysing said failure analysis data received from each of said plurality of devices; and

providing failure information therefrom.

- 18. The method of claim 17 wherein said device includes an algorithm for managing the operation of the failure tolerant component and wherein said failure information includes an updated algorithm for providing improved operation of said failure tolerant component.
- 19. The method of claim 18 wherein said updated algorithm is transmitted to said device via said network.
- 20. The method of claim 17 wherein said failure information is used to improve design and manufacturing steps for future devices.
- 21. The method of claim 17 wherein said failure information provides an indication of operating lifespan of said devices.
- 22. The method of claim 19 wherein said device is coupled to said network via an intermediary software agent.
- 23. The method of claim 22 wherein said intermediary software agent is installed on a local server.
- 24. The method of claim 23 wherein said local server includes a database arranged for storing said failure analysis data from said device, said local server being arranged for periodically uploading said failure analysis data to said manufacturer's server.